



CRY3404-S01

1/4" Pressure-field Prepolarized High-level Microphone Set



Features

● Features

Sensitivity	0.56 mV/Pa
Dynamic Range	53 dBA to 175 dB
Frequency Range	10 Hz to 20 kHz ± 2 dB

● Applications

High-frequency (ultrasonic) measurements
High-definition speakers, headphones, and earbud measurements
High Sound Pressure Level (SPL) measurements

● Standards

IEC 61094 4:1995 Measurement microphones - Part 4

● Components

CRY3404 1/4" Pressure-field Prepolarized Microphone
CRY3543 1/4" IEPE Preamplifier

Introduction

The CRY3404-S01 is a 1/4" pressure field pre-polarisation measurement microphone and preamplifier set designed for high sound pressure level acoustic measurement.

It is capable of acoustic testing in extremely high sound pressure environments and can withstand sound pressure levels up to 175 dB. It is suitable for measuring sound characteristics in high-volume environments and evaluating and optimizing acoustic environments.

Highlights

● Use of High-level Pressure-field Microphones

High-level microphones enable acoustic testing in extremely high sound pressure environments and are particularly suitable for measuring sound characteristics in large volume environments as well as evaluating and optimising acoustic environments.

Pressure-field microphone sets are specifically designed for measurements in small enclosed cavities or near the sound source ports, and are widely used in fields such as acoustic research and electroacoustic testing.

● Compatibility

The CRY SOUND pre-polarised microphone kit requires a constant current source power module (IEPE power supply) that can provide a current of 2 mA to 20 mA and a no-load voltage of 24V.

IEPE is a universal constant current source power supply technology used on sensors. Each manufacturer has different names, such as ICP, CCP, etc.

● TEDS Microphone Set

Supports TEDS, and TEDS programmed to the IEEE 1451.4 standard for SMART transducers, V 1.0 format.

● Calibration

Each CRY SOUND microphone set is calibrated at the factory using traceable calibration equipment. Calibration certificates are provided with each unit. CRY SOUND recommends recalibration at least once a year.

● Quality & Warranty

All CRY SOUND microphone capsules use 3rd generation titanium diaphragms and protection grids and synthetic sapphire insulators - resulting in the most rugged and reliable measurement microphones on the market. Titanium provides superior corrosion resistance, high temperature stability, impact resistance and strength-to-mass than traditional nickel and stainless steel. All capsules are assembled in strict clean-room environments for maximum quality.

CRY SOUND microphones and preamplifiers are supported by a 10-year warranty—offering one of the best service guarantee in the world.

Technical Specifications

Specifications

Field Type	Pressure-field
Sensitivity (± 3 dB)	0.56 mV/Pa, -65 dB re 1V/Pa
Frequency Response	10 Hz to 20 kHz ± 2 dB
Polarization Voltage	0 V
Dynamic Range (re.20uPa)	dBA to 175 dB
Operating Temperature	-30°C to +70°C (-22°F to +158°F)
Temperature Stability	-0.002 dB/°C (-10 to +50°C) -0.001 dB/°F (+14 to +122°F)
Static Pressure Stability	-30°C to +70°C (-22°F to +158°F)
Operating Humidity Range	0 to 90%RH no condensation
Humidity Stability	< 0.1 dB (0 to 90%RH no condensation)
Pressure Equalization Vent	Side vented
IEC 61094-4 Type	WS3P
Output Impedance	<50 Ω
Maximum Output Voltage	>10.0 Vp
DC Bias Voltage	12V ± 2 V
Current Source	IEPE (2 mA to 20 mA)
Typical Operating Current	4 mA
Interface Type	10-32UNF(Microdot)

Frequency Response

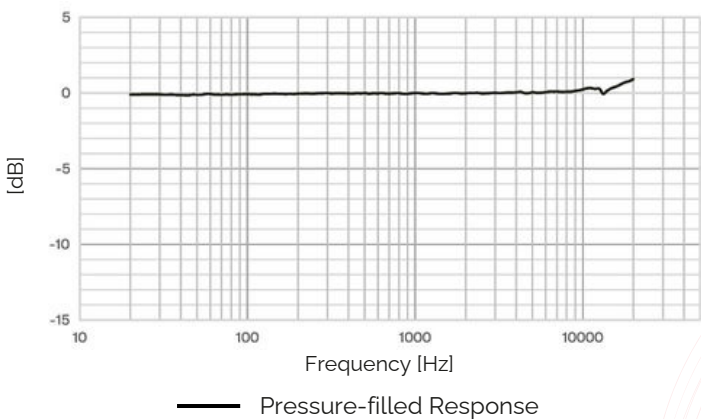


Fig.1 CRY3404-S01 Microphone Set Typical Frequency Response

Dimensions

Height with Grid	56.2 mm (2.213")
Diameter with Grid	7 mm (0.276")

Drawings (mm) [inch]

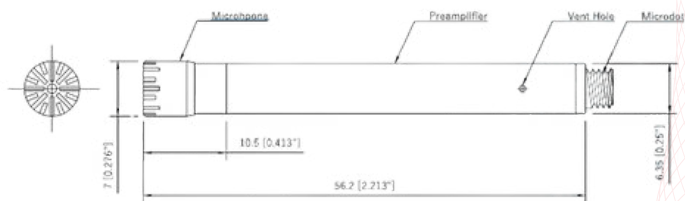


Fig.2 CRY3404-S01 Microphone Set Drawings

Ordering information

Consisting of

Measurement Microphone	CRY3404 1/4" Pressure-field Prepolarized Microphone
Preamplifier	CRY3543 1/4" IEPE Preamplifier
Cable	Microdot to BNC Cable /1.5m

Consisting of

Microphone Clamp	1/4" Microphone Clamp
Power Supply	CRY575 Three-channel Microphone Power Supply



Check out our microphone selection tool

Related Products

CRY3102-S01	1" pressure-field prepolarized low-noise microphone set, 50 mV/Pa, 4 Hz-8 kHz, 12 dBA-136dB
CRY3202-S01	1/2" pressure-field pre-polarised wide frequency microphone set, 12.5 mV/Pa, 3.15 Hz-20kHz, 23 dBA-148dB
CRY3402-S01	1/4" pressure-field pre-polarised ultra-high frequency microphone set, 1.6 mV/Pa, 4 Hz-70kHz, 45dB-166 dB
CRY3406-S01	1/4" pressure-field pre-polarised low-noise microphone set, 15.8 mV/Pa, 4 Hz-20kHz, 26dB-146 dB